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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Navy									DATE: February 2011		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0304785N: Tactical Cryptologic Systems							
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
Total Program Element	19.735	17.019	31.740	-	31.740	14.784	14.196	14.482	14.737	Continuing	Continuing
2134: Shipboard IW Exploit	16.845	16.554	31.740	-	31.740	14.784	14.196	14.482	14.737	Continuing	Continuing
3165: Automatic Identification System (AIS)	0.500	0.465	-	-	-	-	-	-	-	0.000	0.965
9999: Congressional Adds	2.390	-	-	-	-	-	-	-	-	0.000	2.390

A. Mission Description and Budget Item Justification

The Shipboard Information Warfare (IW) line includes the Ships Signal Exploitation Equipment (SSEE) Increment (Inc) E, F and G programs that execute a major component of the Maritime Cryptologic Systems for the 21st Century. The SSEE program is a classified IW / Information Operations (IO) and tactical cryptologic system that subsequently provides critical tactical intelligence, situational awareness, battlespace awareness, indications and warnings, and hostile threat assessment. As a spiral acquisition program, Research, Development, Test & Evaluation (RDT&E) funding is required to have new technologies and associated new operational capabilities rapidly developed and transitioned as Pre-Planned Product Improvements (P3I) upgrades into the system's hardware/software configuration. These systems provide the battle group and combatant commanders with the surfaces fleet's only IO non-kinetic capabilities ("Finish"). In addition they provide the battle groups with real time indications and warnings by acquisition ("Find") and localization ("Fix") of Signals of Interest (SOI). This program's funding is required to incorporate P3I, new Commercial Off-the-Shelf (COTS) based technologies and software into the existing systems. Funding will also focus on developing and delivering expanded non-kinetic IO capabilities and net-centric Service Oriented Architecture (SOA), which includes the development, integration and test of "Ballistic Missile Defense (BMD) Executive Committee (EXCOM) Anti-Submarine Warfare (ASW) Chief of Naval Operations (CNO) Executive Board IO Countermeasure Red Flash/Medusa (details classified) " and Paragon, a frequency extension and targeting enhancement, into SSEE Inc F and G programs. SSEE Inc F will be developing software and hardware upgrades in support of emergent adversary signals of interest and SSEE Inc G will integrate and improve upon all aspects of the "BMD EXCOM ASW CNO CEB IO Countermeasure Red Flash/Medusa" and Paragon, extending their range, automation, and integration into a coordinated IO weapon system.

Graywing is an electronic sensing and attack capability that will be integrated into SSEE Inc E, F and G systems. It is a critical component of "BMD EXCOM ASW CEB IO Countermeasure Red Flash" with details held at a higher classification level. GRAYWING will commence the production of its Engineering Development Model (EDM) as well as its initial laboratory, integration, environmental and testing.

Integrated Communications and Data System (ICADS) is a non-kinetic capability that can be rapidly developed to counter a serious threat to afloat units. ICADS provides a counter-Intelligence, Surveillance, Reconnaissance (ISR) capability against adversary sensor systems (specific development/capability details are held at a higher classification).

Automatic Identification System (AIS) is an International Maritime Very High Frequency Communication system that allows any ship to exchange information (machine to machine) on Navigation (Position, Course, Speed, etc), Ship Info (Ship Name, Call Sign, Length/Beam), and Cargo Info (Draft, Type, Destination, Route, Estimated Time of Arrival) and Messaging (Safety, Text). This technology will improve capability in three diverse areas: (a) Situational Awareness/Common Operational Picture

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APPROPRIATION/BUDGET ACTIVITY		R-1 ITEM NOMENCLATURE					
1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)		PE 0304785N: Tactical Cryptologic Systems					
(b) Navigation/Safety of Ship and (c) Other intelligence gathering/correlation. Funding will support the integration of modified COTS AIS equipment with the existing Global Command and Control - Maritime/Common Operational Picture, navigation and bridge display capabilities, surface search / weapons systems and intelligence / Cryptologic capabilities							
Congressional Adds: Paragon(Frequency Extension) is a classified Navy tactical signals intelligence frequency extension capability that will be integrated into Ships Signal Exploitation Equipment (SSEE) Inc E and F programs. This capability provides simultaneous detection, collection, processing, Information Operations and display of communication intelligence data from hostile, high threat and adversary platforms in select frequency ranges that are not prosecuted or countered today.							
FY12 funding will incorporate further Pre-Planned Product Improvements (P3I), new Commercial Off-the-Shelf (COTS) based technologies and software into SSEE Inc F and G. SSEE Inc F will be developing software and hardware upgrades in support of emergent adversary signals of interest. SSEE Inc G will be doing pre-acquisition research into software, hardware, and CYBER capabilities in support of Milestone B and the release of a Request for Proposal (RFP). Graywing will commence the production of its Engineering Development Model (EDM) as well as its initial laboratory, integration, environmental and testing. Funding will also focus on the continuation of efforts in support of the integration and testing of "BMD EXCOM ASW CEB IO Countermeasure Red Flash/Medusa," Paragon, and Graywing into SSEE Inc F and G.							
B. Program Change Summary (\$ in Millions)		FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	
Previous President's Budget		19.833	17.019	16.567	-	16.567	
Current President's Budget		19.735	17.019	31.740	-	31.740	
Total Adjustments		-0.098	-	15.173	-	15.173	
• Congressional General Reductions			-				
• Congressional Directed Reductions			-				
• Congressional Rescissions		-	-				
• Congressional Adds			-				
• Congressional Directed Transfers			-				
• Reprogrammings		-	-				
• SBIR/STTR Transfer		-	-				
• Program Adjustments		-	-	15.502	-	15.502	
• Section 219 Reprogramming		-0.098	-	-	-	-	
• Rate/Misc Adjustments		-	-	-0.329	-	-0.329	
Congressional Add Details (\$ in Millions, and Includes General Reductions)							
Project: 9999: Congressional Adds							
Congressional Add: Paragon System Upgrades							
						FY 2010	FY 2011
						2.390	-
						2.390	-

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<u>Congressional Add Details (\$ in Millions, and Includes General Reductions)</u>		FY 2010	FY 2011
<div style="text-align: right; padding-right: 20px;">Congressional Add Subtotals for Project: 9999</div>			
<div style="text-align: right; padding-right: 20px;">Congressional Add Totals for all Projects</div>		2.390	-
<u>Change Summary Explanation</u> The increase in FY 2012 from PB 2011 reflects the transfer of efforts and funds for Graywing and Medusa from PE 0204575N.			

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Navy **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>				R-1 ITEM NOMENCLATURE PE 0304785N: <i>Tactical Cryptologic Systems</i>				PROJECT 2134: <i>Shipboard IW Exploit</i>			
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
2134: <i>Shipboard IW Exploit</i>	16.845	16.554	31.740	-	31.740	14.784	14.196	14.482	14.737	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

Note

Funding and developmental efforts for Graywing transferred from PE 0204575N, project unit 2263 beginning in FY12.

A. Mission Description and Budget Item Justification

The Shipboard Information Warfare (IW) line includes the Ships Signal Exploitation Equipment (SSEE) Increment (Inc) E, F and G programs that execute a major component of the Maritime Cryptologic Systems for the 21st Century. The SSEE program is a classified IW / Information Operations (IO) and tactical cryptologic system that subsequently provides critical tactical intelligence, situational awareness, battlespace awareness, indications and warnings, and hostile threat assessment. As a spiral acquisition program, Research, Development, Test & Evaluation (RDT&E) funding is required to have new technologies and associated new operational capabilities rapidly developed and transitioned as Pre-Planned Product Improvements (P3I) upgrades into the system's hardware/software configuration. These systems provide the battle group and combatant commanders with the surfaces fleet's only IO non-kinetic capabilities ("Finish"). In addition they provide the battle groups with real time indications and warnings by acquisition ("Find") and localization ("Fix") of Signals of Interest (SOI). This program's funding is required to incorporate P3I, new Commercial Off-the-Shelf (COTS) based technologies and software into the existing systems. Funding will also focus on developing and delivering expanded non-kinetic IO capabilities and net-centric Service Oriented Architecture (SOA), which includes the development, integration and test of "Ballistic Missile Defense (BMD) Executive Committee (EXCOM) Anti-Submarine Warfare (ASW) Chief of Naval Operations (CNO) Executive Board IO Countermeasure Red Flash/Medusa (details classified) " and Paragon, a frequency extension and targeting enhancement, into SSEE Inc F and G programs. SSEE Inc F will be developing software and hardware upgrades in support of emergent adversary signals of interest and SSEE Inc G will integrate and improve upon all aspects of the "BMD EXCOM ASW CNO CEB IO Countermeasure Red Flash/Medusa" and Paragon, extending their range, automation, and integration into a coordinated IO weapon system.

Graywing is an electronic sensing and attack capability that will be integrated into SSEE Inc E, F and G systems. It is a critical component of "BMD EXCOM ASW CEB IO Countermeasure Red Flash" with details held at a higher classification level. Graywing will commence the production of its Engineering Development Model (EDM) as well as its initial laboratory, integration, environmental and testing.

Integrated Communications and Data System (ICADS) is a non-kinetic capability that can be rapidly developed to counter a serious threat to afloat units. ICADS provides a counter-Intelligence, Surveillance, Reconnaissance (ISR) capability against adversary sensor systems (specific development/capability details are held at a higher classification).

FY12 funding will incorporate further P3I, new COTS based technologies and software into SSEE Inc F and G. SSEE Inc F will be developing software and hardware upgrades in support of emergent adversary signals of interest. SSEE Inc G will be doing pre-acquisition research into software, hardware, and CYBER capabilities in support of Milestone B and the release of a Request for Proposal (RFP). GRAYWING will commence the production of its Engineering Development Model (EDM)

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as well as its initial laboratory, integration, environmental and testing. Funding will also focus on the continuation of efforts in support of the integration and testing of "BMD EXCOM ASW CEB IO Countermeasure Red Flash/Medusa," Paragon, and Graywing into SSEE Inc F and G.					
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2010	FY 2011	FY 2012
Title: Ship Signal Exploitation Equipment Inc E (SSEE Inc E) Articles: FY 2010 Accomplishments: Completed development efforts for SSEE Inc E. Completed the expansion of Signals of Interest (SOI) processing capability to allow collection of the newest high priority modern technology threat signals for tightly integrated Information Operations (IO) / non-kinetic, and processing and analysis capabilities. Completed the development and integration of CUB software in support of battlegroup interoperability. Completed the development and integration to Hostile Forces Integrated Targeting System (HITS) to integrate both national and tactical Intelligence, Surveillance, and Reconnaissance (ISR) sensors for new and emerging SOI.			1.739 0	-	-
Title: Ship Signals Exploitation Equipment Inc F (SSEE Inc F) Articles: FY 2010 Accomplishments: Completed Engineering Development Model (EDM) interoperability testing, platform integration efforts, environmental qualifications and correction of deficiencies identified during operational assessment. Achieved Milestone C (MSC) in Q2 FY10. Continued to expand SOI processing capability to allow collection of the newest high priority modern technology threat signals for tightly integrated IO/non-kinetic capabilities for support to time critical military strike operations and subsequent processing and analysis capabilities for timely and accurate situational awareness for force protection. Funding focused on developing and delivering IO capabilities based on FY10 SOI threats and Net-Centric SOA including development integration and test of "Ballistic Missile Defense (BMD) Executive Committee (EXCOM) Anti-Submarine Warfare (ASW) Chief of Naval Operations Executive Board (CEB) IO Countermeasure Red Flash" (program details classified), and Paragon (Frequency Extension/Targeting Enhancement) for integration into SSEE Inc F. FY 2011 Plans: Continue to expand SOI processing capability to allow collection of the newest high priority modern technology threat signals for tightly integrated IO/non-kinetic capabilities for support to time critical military strike operation and subsequent processing and analysis capabilities for timely and accurate situational awareness for force protection. Conduct operational evaluation in support of full rate decision. Correct limitations identified in operational evaluation in support of Follow on Test and Evaluation (FOT&E). Continue to develop and deliver IO capabilities based on FY11 SOI threats and Net-Centric SOA including development integration and test of "BMD EXCOM ASW CEB IO Countermeasure Red Flash/Medusa" and Paragon (Frequency Extension/Targeting Enhancement capabilities) for integration into SSEE Inc F. FY 2012 Plans:			11.677 0	15.615 0	4.638 0

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2010	FY 2011
Conduct FOT&E for SSEE INC F, platform integration, and environmental qualifications for SSEE Inc F Paragon EDM. Continue to expand SOI processing capability to allow collection of the newest high priority modern technology threat signals for tightly integrated IO/non-kinetic capabilities for support to time critical military strike operation and subsequent processing and analysis capabilities for timely and accurate situational awareness for force protection. Continue to develop and deliver IO capabilities based on FY12 SOI threats for "BMD EXCOM ASW CEB IO Countermeasure Red Flash/Medusa" and Paragon (Frequency Extension/Targeting Enhancement capabilities) for integration into SSEE Inc F.			
Title: Ship Signals Exploitation Equipment Inc G (SSEE Inc G) FY 2012 Plans: Commence the initial research and pre-acquisition activities leading up to Milestone B (MSB) and the release of a Request for Proposal (RFP) for both software and hardware in support of SSEE Inc G. Conduct research into CYBER capabilities (details classified) that can be integrated into SSEE Inc G software and determine if their use is feasible in the maritime environment. SSEE Inc G will expand upon the SSEE Inc F capability of exploiting signals throughout the Radio Frequency (RF) spectrum, in addition to focusing new technologies towards new and previously unexplored/unexploited CYBER capabilities as we integrate into the Electronic Warfare (EW) Battle Management Network. SSEE Inc G will integrate and improve upon all aspects of "BMD EXCOM ASW CEB IO Countermeasure Red Flash/Medusa" (program details classified) and Paragon, extending their range, automation, and integration into a coordinated IO weapon system.		-	-
		Articles:	9.737 0
Title: Integrated Communications and Data Systems (ICADS)		3.429 0	0.939 0
FY 2010 Accomplishments: Integrated Communications and Data System (ICADS) is a non-kinetic capability that can be rapidly developed to counter a serious threat to afloat units. ICADS provides a counter-Intelligence, Surveillance, Reconnaissance (ISR) capability against adversary sensor systems (specific development/capability details are held at a higher classification). FY 2011 Plans: ICADS is a non-kinetic capability that can be rapidly developed to counter a serious threat to afloat units. ICADS provides a counter-ISR capability against adversary sensor systems (specific development/capability details are held at a higher classification).		Articles:	-
Title: Graywing		-	-
		Articles:	17.365 0
FY 2012 Plans:			

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)											
							FY 2010	FY 2011	FY 2012		
Accelerate development and integration and testing of Graywing capability to operationalize within the Future Year Defense Plan (FYDP). Continue to develop and build Graywing antenna suite. Conduct laboratory and environmental testing for the antenna suite and integration testing of Graywing software with the antenna suite. Conduct integration testing of Graywing Engineering Development Model (EDM) with SSEE Inc E, F and G software. Install EDM and conduct interoperability and integration testing, platform integration efforts and environmental qualifications. Focus on integrating Graywing with SSEE systems as part of "BMD EXCOM ASW CEB IO Countermeasure Red Flash." Note: Funding and developmental efforts for Graywing transferred from PE 0204575N, project unit 2263 beginning in FY12.											
Accomplishments/Planned Programs Subtotals							16.845	16.554	31.740		
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• OPN / 2360: <i>Shipboard IW Exploit</i>	89.406	105.624	103.645	0.000	103.645	117.527	119.831	137.723	144.787	Continuing	Continuing
D. Acquisition Strategy Acquisition, management and contracting strategies are to support engineering and manufacturing development by providing funds to a Prime Contractor and Space & Naval Warfare Systems Command (SPAWAR) Systems Center (SSC) - Atlantic, SSC - Pacific and miscellaneous contractors, with management oversight by SPAWAR.											
E. Performance Metrics Ship Signal Exploitation Equipment (SSEE) Inc F achieved Milestone C (MSC) in FY10. SSEE Inc F is scheduled to achieve Full Rate Production (FRP) in FY11.											

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Navy											DATE: February 2011		
APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE				PROJECT					
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Product Development (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Primary Hardware Development	Various	Various:Various	73.395	-		-		-		-	Continuing	Continuing	Continuing
Primary Hardware Development	WR	SSC PAC:San Diego, CA	-	1.125	Nov 2010	7.250	Nov 2011	-		7.250	Continuing	Continuing	Continuing
Systems Engineering	Various	Various:Various	22.309	-		-		-		-	Continuing	Continuing	Continuing
Systems Engineering	C/CPAF	Classified Contract:Classified Contract	-	0.950	Nov 2010	3.159	Nov 2011	-		3.159	Continuing	Continuing	Continuing
Systems Engineering	WR	SSC PAC:San Diego, CA	-	0.750	Nov 2010	1.650	Nov 2011	-		1.650	Continuing	Continuing	Continuing
Systems Engineering	WR	SSC LANT:Charleston, SC	1.324	1.161	Nov 2010	1.487	Nov 2011	-		1.487	Continuing	Continuing	Continuing
Training Development	WR	SSC PAC:San Diego, CA	1.476	0.220	Nov 2010	0.613	Nov 2011	-		0.613	Continuing	Continuing	Continuing
Subtotal			98.504	4.206		14.159		-		14.159			
Support (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Software Development	Various	Various:Various	40.776	-		-		-		-	Continuing	Continuing	Continuing
Software Development	C/CPAF	Classified Contract:Classified Contract	6.284	5.516	Nov 2010	8.420	Nov 2011	-		8.420	Continuing	Continuing	Continuing
Software Development	WR	SSC PAC:San Diego, CA	-	0.392	Nov 2010	0.465	Nov 2011	-		0.465	Continuing	Continuing	Continuing
Training Development	Various	Various:Various	0.079	-		-		-		-	Continuing	Continuing	Continuing
Training Development	C/CPFF	Classified Contract:Classified Contract	-	0.445	Nov 2010	0.907	Nov 2011	-		0.907	Continuing	Continuing	Continuing
Integrated Logistics Support	Various	Various:Various	2.206	-		-		-		-	Continuing	Continuing	Continuing

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1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)				PE 0304785N: Tactical Cryptologic Systems				2134: Shipboard IW Exploit					
Support (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Integrated Logistics Support	C/CPFF	Unknown:Unknown	-	-		0.300	Nov 2011	-		0.300	0.000	0.300	
Configuration Management	WR	SSC Lant:Charleston, SC	1.336	0.054	Nov 2010	0.123	Nov 2011	-		0.123	Continuing	Continuing	Continuing
Configuration Management	WR	SSC PAC:San Diego, CA	-	0.113	Nov 2010	0.123	Nov 2011	-		0.123	Continuing	Continuing	Continuing
Technical Data	Various	Various:Various	0.542	-		-		-		-	Continuing	Continuing	Continuing
Technical Data	WR	SSC PAC:San Diego, CA	-	0.219	Nov 2010	0.917	Nov 2011	-		0.917	0.000	1.136	
Subtotal			51.223	6.739		11.255		-		11.255			
Test and Evaluation (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	Various	Various:Various	7.375	-		-		-		-	Continuing	Continuing	Continuing
Developmental Test & Evaluation	WR	SSC PAC:San Diego, CA	-	0.505	Nov 2010	0.925	Nov 2011	-		0.925	Continuing	Continuing	Continuing
Developmental Test & Evaluation	WR	SSC LANT:Charleston, SC	-	0.817	Nov 2010	1.128	Nov 2011	-		1.128	Continuing	Continuing	Continuing
Developmental Test & Evaluation	WR	Washington Labs:Gaithersburg, MD	-	0.400	Nov 2010	0.776	Nov 2011	-		0.776	Continuing	Continuing	Continuing
Operational Test & Evaluation	WR	OPTEVFOR:Norfolk, VA	2.791	0.287	Nov 2010	0.395	Nov 2011	-		0.395	Continuing	Continuing	Continuing
Test Assets	WR	SSC PAC:San Diego, CA	1.747	-		-		-		-	Continuing	Continuing	Continuing
Test Assets	WR	SSC LANT:Charleston, SC	-	0.070	Nov 2010	0.085	Nov 2011	-		0.085	Continuing	Continuing	Continuing
Subtotal			11.913	2.079		3.309		-		3.309			

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1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)				PE 0304785N: Tactical Cryptologic Systems				2134: Shipboard IW Exploit					
Management Services (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Contractor Engineering Support	Various	Various:Various	0.933	-		-		-		-	Continuing	Continuing	Continuing
Contractor Engineering Support	C/CPFF	Classified Contract:Classified Contract	-	0.952	Nov 2010	0.652	Nov 2011	-		0.652	Continuing	Continuing	Continuing
Government Engineering Support	Various	Various:Various	1.290	-		-		-		-	Continuing	Continuing	Continuing
Government Engineering Support	WR	SSC LANT:Charleston, SC	-	0.407	Nov 2010	0.525	Nov 2011	-		0.525	Continuing	Continuing	Continuing
Government Engineering Support	WR	SSC PAC:San Diego, CA	-	1.040	Nov 2010	0.668	Nov 2011	-		0.668	Continuing	Continuing	Continuing
Program Management Support	Various	Various:Various	16.211	-		-		-		-	Continuing	Continuing	Continuing
Program Management Support	C/CPFF	Classified Contract:Classified Contract	-	0.535	Nov 2010	0.614	Nov 2011	-		0.614	Continuing	Continuing	Continuing
Program Management Support	WR	SSC LANT:Charleston, SC	-	0.065	Nov 2010	0.063	Nov 2011	-		0.063	Continuing	Continuing	Continuing
Travel	WR	SPAWAR:San Diego, CA	1.570	0.531	Nov 2010	0.495	Nov 2011	-		0.495	Continuing	Continuing	Continuing
Acquisition Workforce	Various	Various:Various	0.062	-		-		-		-	Continuing	Continuing	Continuing
Subtotal			20.066	3.530		3.017		-		3.017			
			Total Prior Years Cost	FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			181.706	16.554		31.740		-		31.740			
Remarks													

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Exhibit R-4, RDT&E Schedule Profile: PB 2012 Navy		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0304785N: <i>Tactical Cryptologic Systems</i>	PROJECT 2134: <i>Shipboard IW Exploit</i>

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Exhibit R-4A, RDT&E Schedule Details: PB 2012 Navy			DATE: February 2011
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Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Proj 2134				
Inc F - Developmental Testing IT-B2	1	2010	2	2010
Inc F - Developmental Testing IT-C1	4	2010	1	2011
Inc F - Developmental Testing IT-C2	2	2011	3	2011
Inc F - Operational Testing Operational Assessment (OA)	1	2010	1	2010
Inc F - Operational Testing (OT) OPEVAL	2	2011	2	2011
Inc F - Milestone C - Low Rate Initial Production (LRIP)	2	2010	2	2010
Inc F - LRIP Contract Award	2	2010	2	2010
Inc F - Full Rate Production (FRP) Decision	2	2011	3	2011
Inc F - Operational Test (FOT&E)	1	2012	1	2012
Inc F - FRP Contract Award	2	2011	3	2011
Inc F - Initial Operational Capability (IOC)	1	2012	1	2012
Inc F - Material Support Date (MSD)	2	2013	2	2013
Inc G - Milestone B (MSB)	3	2012	3	2012
Inc G - Fequest For Proposal Release (RFP)	4	2012	4	2012
Inc G - Preliminary Design Review (PDR)	3	2013	3	2013
Inc G - Critical Design Review (CDR)	3	2014	3	2014
Inc G - Engineering Development Models (EDM) Deliveries	2	2015	2	2015
Inc G - Developmental Testing - Design Readiness Review (DRR)	1	2014	1	2014
Inc G - Developmental Testing IT-B1	4	2014	4	2014
Inc G - Developmental Testing - Test Readiness Review (TRR)	4	2014	4	2014
Inc G - Developmental Testing IT-B2	1	2015	2	2015

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Exhibit R-4A, RDT&E Schedule Details: PB 2012 Navy		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0304785N: <i>Tactical Cryptologic Systems</i>	PROJECT 2134: <i>Shipboard IW Exploit</i>

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Inc G - Operational Assessment (OA)	2	2016	2	2016
Inc G - Operational Review Decisional Report	4	2016	4	2016

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Navy								DATE: February 2011			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>				R-1 ITEM NOMENCLATURE PE 0304785N: <i>Tactical Cryptologic Systems</i>				PROJECT 3165: <i>Automatic Identification System (AIS)</i>			
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
3165: <i>Automatic Identification System (AIS)</i>	0.500	0.465	-	-	-	-	-	-	-	0.000	0.965
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification											
Automatic Identification System (AIS) is an International Maritime Very High Frequency Communication system that allows any ship to exchange information (machine to machine) on Navigation (Position, Course, Speed, etc), Ship Info (Ship Name, Call Sign, Length/Beam), and Cargo Info (Draft, Type, Destination, Route, Estimated Time of Arrival) and Messaging (Safety, Text). This technology will improve capability in three diverse areas: (a) Situational Awareness/Common Operational Picture (b) Navigation/Safety of Ship and (c) Other intelligence gathering/correlation. Funding will support the integration of modified Commercial Off-The-Shelf AIS equipment with the existing Global Command and Control - Maritime/Common Operational Picture navigation and bridge display capabilities, surface search / weapons systems and intelligence / Cryptologic capabilities.											
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)								FY 2010	FY 2011	FY 2012	
Title: Automatic Identification System (AIS)								0.500	0.465	-	
Articles:								0	0		
FY 2010 Accomplishments: Funds supported developmental testing and operational testing of submarines and shore site AIS configurations. Funds continued to support AIS interoperability requirements, such as incorporation of AIS into Consolidated Afloat Networks and Enterprise Services (CANES) and AIS interoperability with the Maritime Security and Safety Information System (MSSIS). Funds continued the refinement of the Global AIS architecture, and its relation to the overall United States Navy (USN) Maritime Domain Awareness (MDA) effort and Concept of Operations (CONOP) as well as the National MDA CONOP.											
FY 2011 Plans: AIS development will be completed in FY11. Complete the incorporation of AIS interoperability requirements, such as AIS CANES configuration. Complete the refinement of the Global AIS architecture, and its relation to the overall USN MDA effort and CONOP as well as the National MDA CONOP. This will provide a secure end-to-end AIS data sharing capability in-line with National MDA CONOPs.											
Accomplishments/Planned Programs Subtotals								0.500	0.465	-	

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Navy									DATE: February 2011		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0304785N: Tactical Cryptologic Systems				PROJECT 3165: Automatic Identification System (AIS)			
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• OPN / 2361: Automatic Identification System	0.000	1.299	1.364	0.000	1.364	0.917	0.916	0.905	0.914	Continuing	Continuing
• OPN / 2360: : Shipboard IW Exploit (AIS only)	2.399	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.399
D. Acquisition Strategy											
Acquisition management and contracting strategies are to support the integration of Commercial Off-The-Shelf (COTS) Automatic Identification System (AIS) data into the existing and emerging United States Navy Command and Control and Network infrastructure capabilities, navigation and bridge capabilities surface search/ weapons systems and intelligence/cryptologic capabilities. COTS will be procured from a contractor with government over sight from Space and Naval Warfare (SPAWAR) Systems Center (SSC) - Atlantic and SSC - Pacific with management oversight by SPAWAR .											
E. Performance Metrics											
AIS will incorporate new interoperability requirements in order to provide a secure end-to-end AIS data sharing capability with National Maritime Domain Awareness Concept of Operations.											

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Navy								DATE: February 2011			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>				R-1 ITEM NOMENCLATURE PE 0304785N: <i>Tactical Cryptologic Systems</i>				PROJECT 9999: <i>Congressional Adds</i>			
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
9999: <i>Congressional Adds</i>	2.390	-	-	-	-	-	-	-	-	0.000	2.390
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification
 Paragon is a classified Navy tactical signals intelligence frequency extension capability that will be integrated into Ships Signal Exploitation Equipment (SSEE) Inc E and F programs. This capability will provide simultaneous detection, collection, processing, IO and display of communication intelligence data from hostile, high threat and adversary platforms in select frequency ranges that are not prosecuted or countered today.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2010	FY 2011
<i>Congressional Add:</i> Paragon System Upgrades	2.390	-
<i>FY 2010 Accomplishments:</i> Paragon is a classified Navy tactical signals intelligence frequency extension capability that will be integrated into Ships Signal Exploitation Equipment (SSEE) Inc E and F programs. This capability will provide simultaneous detection, collection, processing, IO and display of communication intelligence data from hostile, high threat and adversary platforms in select frequency ranges that are not prosecuted or countered today.		
Congressional Adds Subtotals	2.390	-

C. Other Program Funding Summary (\$ in Millions)
 N/A

D. Acquisition Strategy
 N/A

E. Performance Metrics
 Congressional Add.